

(Annexure H-10)

Computer related Courses
of
Bachelor of Science (Honours) Medical laboratory Technology)
Semester - II
Credit Based Continuous Evaluation Grading System
(CBCEGS)

Session: 2025-26



The Heritage Institution

KANYA MAHA VIDYALAYA
JALANDHAR
(Autonomous)

Kanya Maha Vidyalaya, Jalandhar (Autonomous)

**Bachelor of Science (Honours) Medical laboratory
Technology)**

Session: 2025-26

Credit Based Continuous Evaluation Grading System (CBCEGS)

Bachelor of Science (Honours) Medical laboratory Technology) Semester II										
Course Code	Course Title	Course Type	Hours per week	Credit		Marks				Examination Time (in Hours)
			L-T-P	L-T-P	Total	Total	Ext.		CA	
							L	P		
BMLM-2130	Fundamentals of Data Analytics	SEC	2-0-2	2-0-1	3	100	40	30	30	3+3

Bachelor of Science (Honours) Medical Laboratory Technology Semester-II

Session 2025-26

COURSE CODE: BMLM - 2130

FUNDAMENTALS OF DATA ANALYTICS

Course Outcomes:

On Completion of this course, the student will be able to:

CO1: To understand the basic functionality of various parts of computer and terminologies related to computers and peripherals

CO2: To work with Word documents and apply various formatting techniques, page setup, creation of tables and other functions required in day-to-day word processing tasks.

CO3: To be able to make presentations, adding graphics, charts, audio, video and applying various themes and transition effects required for making an effective PowerPoint presentation.

CO4: Calculate Mean and Correlation using statistical techniques.

Bachelor of Science (Honours) Medical Laboratory Technology Semester-II

Session 2025-26

COURSE CODE: BMLM - 2130

FUNDAMENTALS OF DATA ANALYTICS

Examination Time: (3+3) Hours

L-T-P: 2-0-1

Credit: 3

Max. Marks: 100

Theory: 40

Practical: 30

CA: 30

Instructions for Paper Setter -

- Eight questions of equal marks (8 marks each) are to be set, two in each of the four Sections (A-D).
- Questions of Sections A-D should be set from Units I-IV of the syllabus respectively.
- Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

UNIT I

Computer Fundamentals: Hardware, Software, Memory, Storage devices, I/O Devices and Output Devices, Introduction to Internet and E-Mail.

Word Processing: Creating, Saving and Printing documents, Page setup, Formatting, Spell check, adding Page numbers, Header and Footer, Macros, Creating Tables, Converting table to text and vice versa.

UNIT II

Spreadsheets: Creating Spreadsheets, using different types of functions and Formulae, Cell referencing, create graphs, various types of charts. Pivot tables, vlookup, hlookup, exporting charts to MS – Word.

Create presentations, Formatting, Adding effects and timings.

UNIT III

Data Collection: Meaning, Primary and secondary sources of Data Collection, Sampling and Methods of Sampling.

Measures of Central Tendency: Mean, Median, Mode.

Correlation: Meaning, types of Correlation, Karl Pearson's method of correlation.

UNIT IV

Data Management: Correlation analysis using Excel, Calculation of Mean, Median and Mode using Excel

Data Visualisation Tools: Google Charts and Data Wrapper.

References / Textbooks:

1. Sinha P.K., “Computer Fundamentals”, BPB Publications
2. Norton Peter, “Introduction to Computers”, McGraw Hill Education
3. Rajaraman V (Author), Adabala N, “Fundamentals of Computers”, Prentice Hall India Learning Private Limited
4. Peter Weverka, “Microsoft Office 2016 All-In-One for Dummies”, Wiley
5. Amrinder Pal Singh, Jaspal Singh, Anshuman Sharma, Fundamentals Of Numerical Methods And Statistical Techniques, Lakhanpal Publishers, 4th edition.
6. Kandasamy P.& et Al., Numerical Methods, S. Chand & Company (2006), Reprint Edn. 2006 Edition.